

FIG. 1

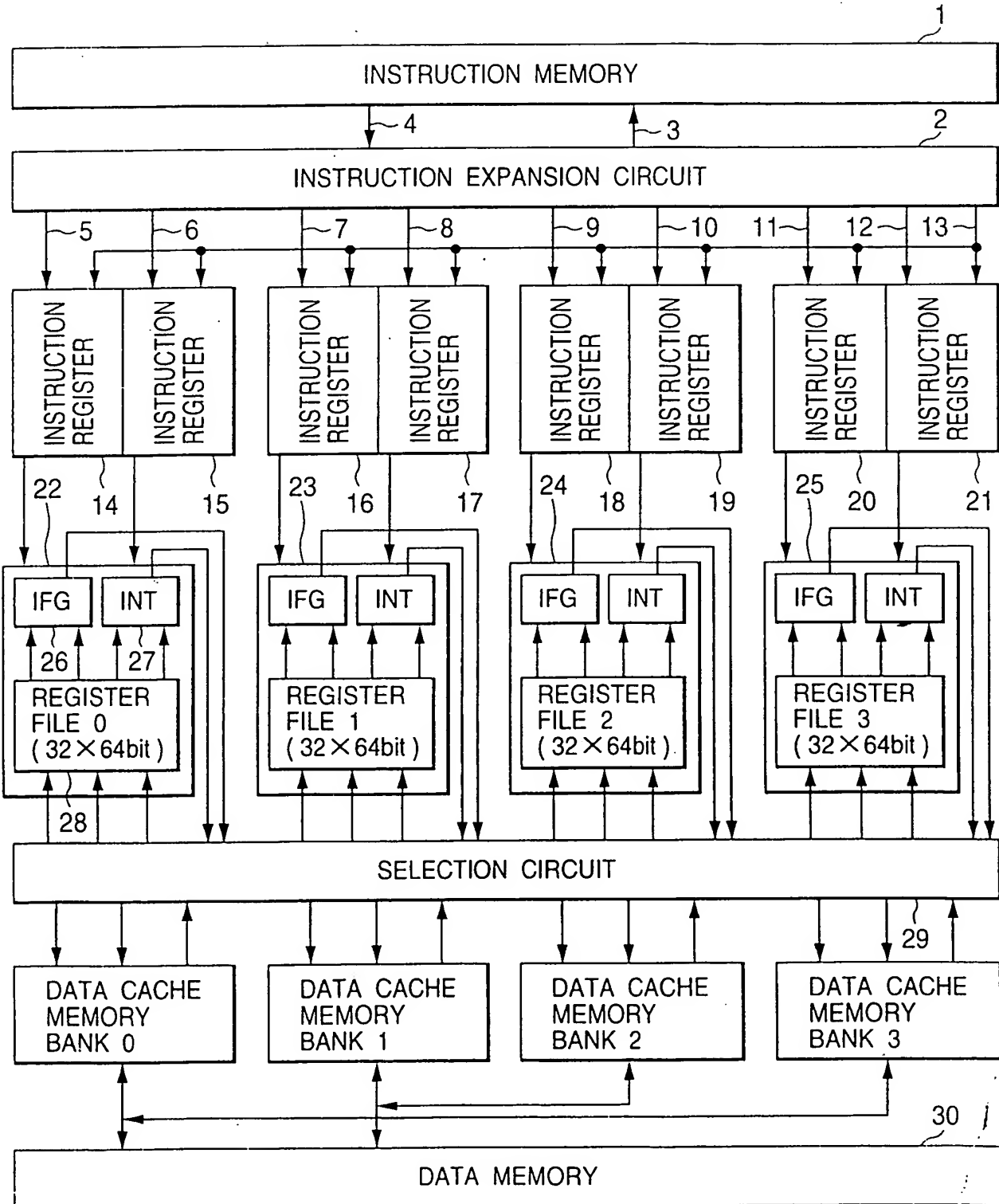


FIG. 2

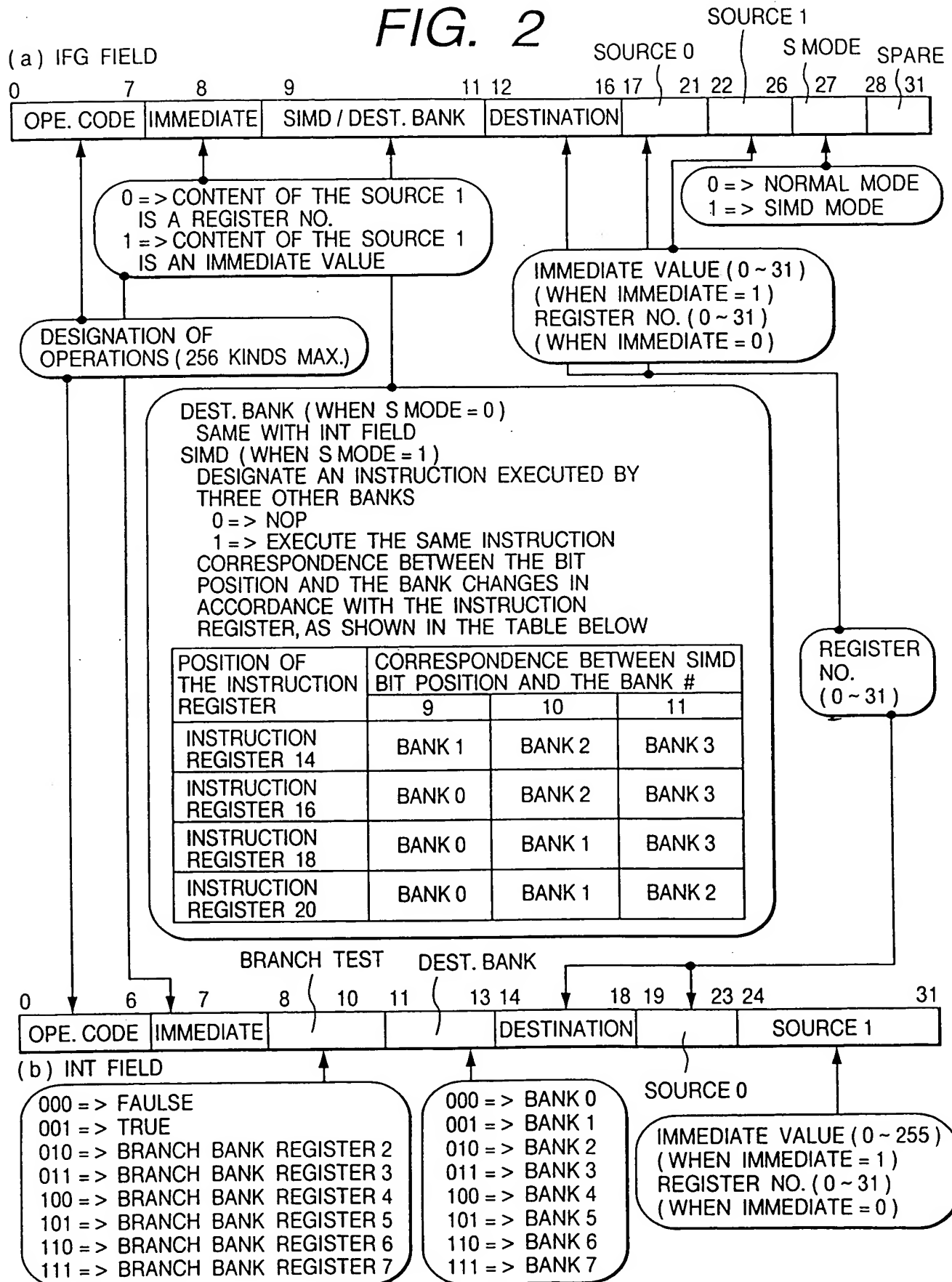
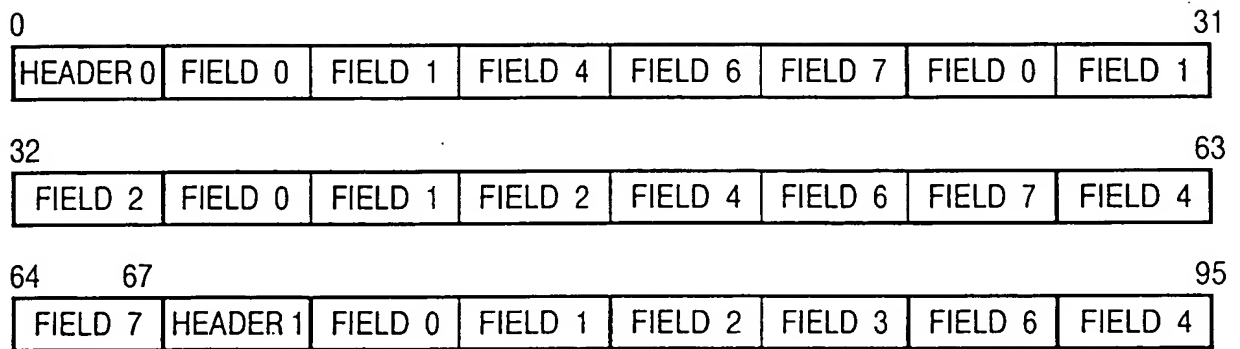


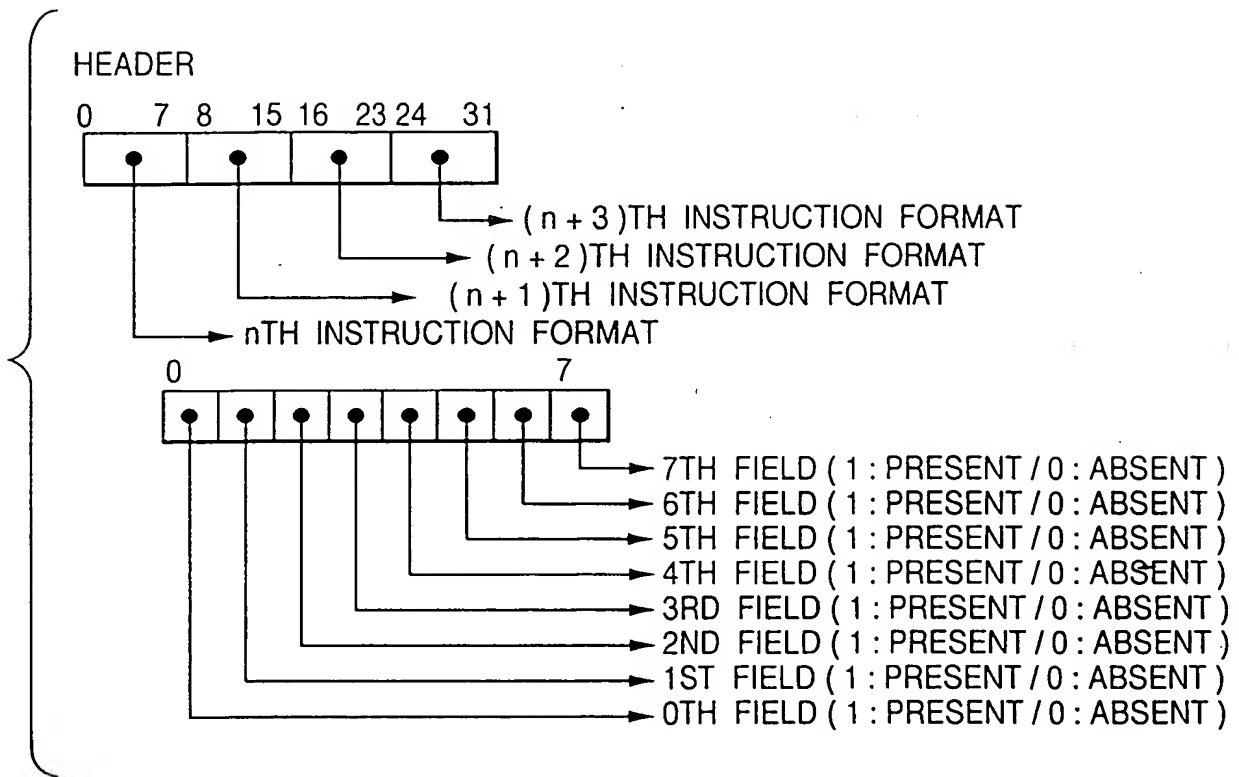
FIG. 3

AN EXAMPLE OF A PROGRAM STORAGE INTO THE INSTRUCTION MEMORY



1ST INSTRUCTION (ADDRESS NOS. 4 ~ 23)
 2ND INSTRUCTION (ADDRESS NOS. 24 ~ 35)
 3RD INSTRUCTION (ADDRESS NOS. 35 ~ 59)
 4TH INSTRUCTION (ADDRESS NOS. 60 ~ 67)
 5TH INSTRUCTION (ADDRESS NOS. 72 ~ 79)
 6TH INSTRUCTION (ADDRESS NOS. 80 ~ 87)
 7TH INSTRUCTION (ADDRESS NOS. 88 ~ 91)
 8TH INSTRUCTION (ADDRESS NOS. 92 ~ 95)

FIG. 4



HEADER 0

0	7	8	15	16	23	24	31																								
1	1	0	0	1	0	1	1	1	1	1	0	0	0	0	0	1	1	1	0	1	0	1	1	0	0	0	0	1	0	0	1

1 (n)TH INSTRUCTION FORMAT

0								255
FIELD 0	FIELD 1	NOP	NOP	FIELD 4	NOP	FIELD 6	FIELD 7	

2 (n+1)TH INSTRUCTION FORMAT

0								255
FIELD 0	FIELD 1	FIELD 2	NOP	NOP	NOP	NOP	NOP	

3 (n+2)TH INSTRUCTION FORMAT

0								255
FIELD 0	FIELD 1	FIELD 2	NOP	FIELD 4	NOP	FIELD 6	FIELD 7	

4 (n+3)TH INSTRUCTION FORMAT

0								255
NOP	NOP	NOP	NOP	FIELD 4	NOP	NOP	FIELD 7	

0	7	8	15	16	23	24	31
1	1	0	0	1	0	1	1
1	1	1	1	1	0	0	0
0	0	0	0	1	1	1	0
1	0	1	0	1	0	1	1
0	0	0	0	0	0	0	1
0	0	1	0	0	1	0	0
1	0	0	1	0	0	1	1

0							255
FIELD 0	FIELD 1	NOP	NOP	FIELD 4	NOP	FIELD 6	FIELD 7

0					255		
FIELD 0	FIELD 1	FIELD 2	NOP	NOP	NOP	NOP	NOP

0								255																							
FIELD 0				FIELD 1				FIELD 2				NOP				FIELD 4				NOP				FIELD 6				FIELD 7			

0								255
NOP	NOP	NOP	NOP	FIELD 4	NOP	NOP	FIELD 7	


[illegible]

0								255
FIELD 0	FIELD 1	FIELD 0	FIELD 1	FIELD 0	FIELD 1	FIELD 0	FIELD 1	

0								255	
NOP	NOP	FIELD 2	FIELD 3	FIELD 2	FIELD 3	NOP	NOP		

0								255							
FIELD 6		NOP		NOP		NOP		FIELD 6		NOP		FIELD 6		NOP	

0								255
	NOP	NOP	NOP	NOP	FIELD 4	NOP	FIELD 4	NOP

 A FIELD DESIGNATING AN SIMD MODE


 A COPIED FIELD

FIG. 7

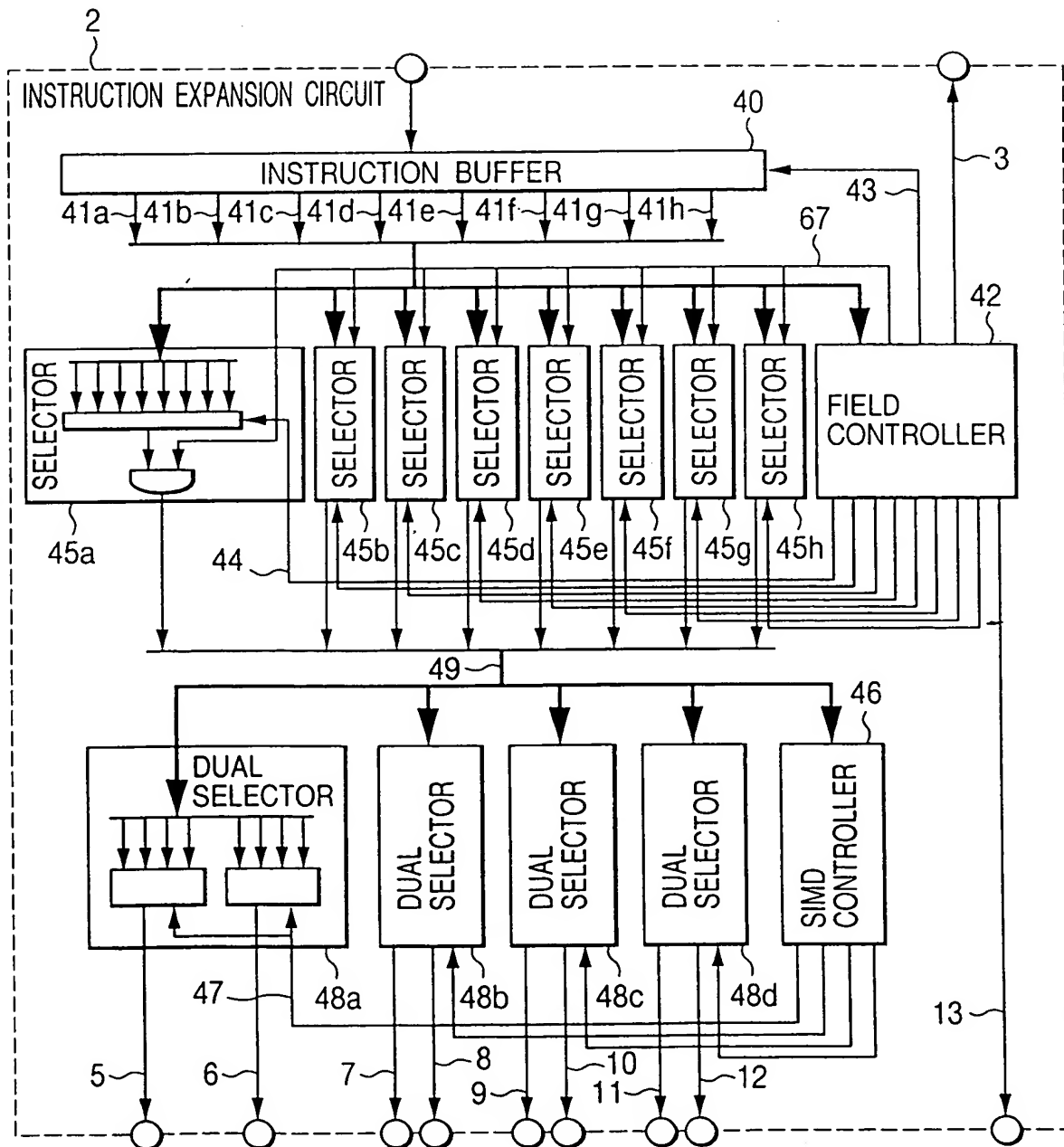


FIG. 8

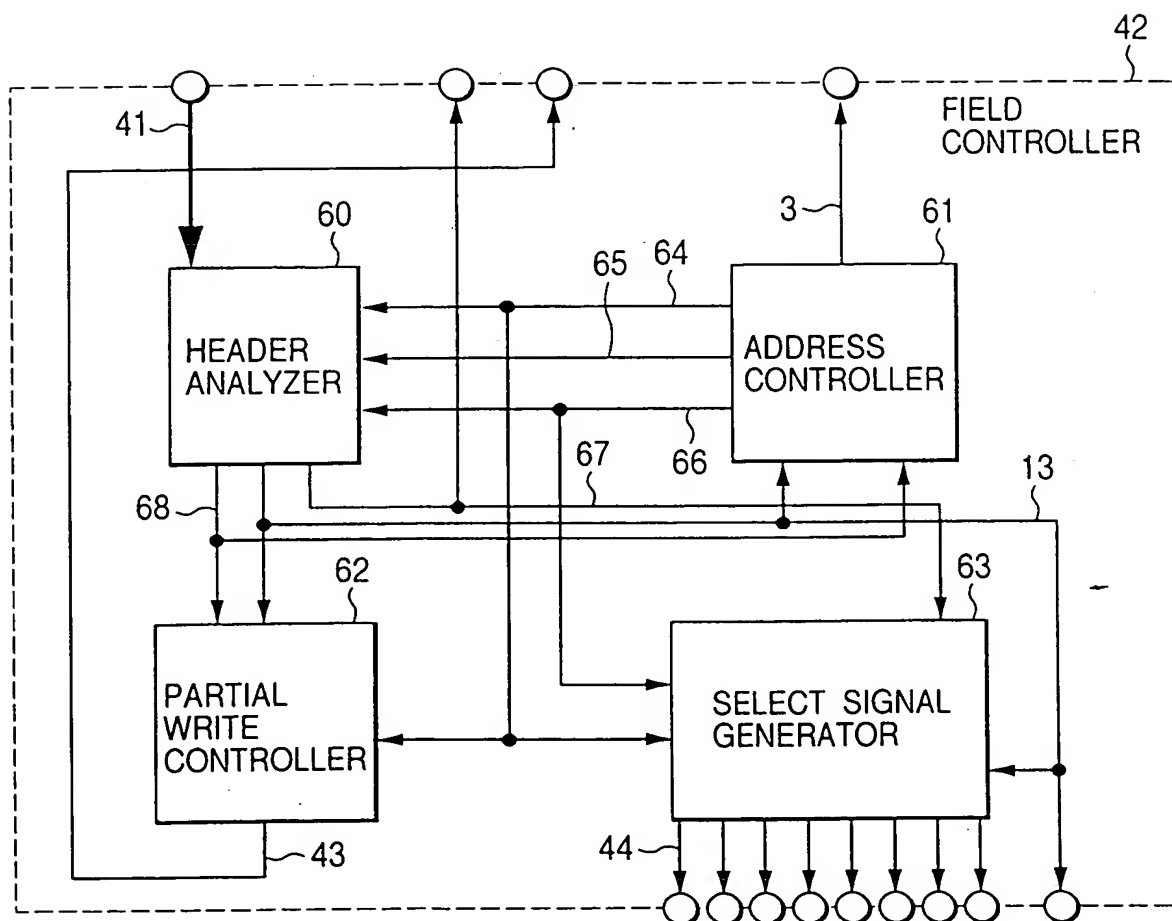


FIG. 9

AN EXAMPLE OF A PROGRAM STORAGE INTO THE INSTRUCTION MEMORY

0							31
HEADER	FIELD 0	FIELD 1	FIELD 4	FIELD 6	FIELD 7	FIELD 0	FIELD 1
32							63
FIELD 2	FIELD 0	FIELD 1	FIELD 2	FIELD 3	FIELD 4	FIELD 5	FIELD 6
64		72					95
FIELD 7	FIELD 0	HEADER	FIELD 0	FIELD 1	FIELD 2	FIELD 3	FIELD 4
96			108				127
FIELD 5	FIELD 6	FIELD 7	FIELD 1	FIELD 2	FIELD 3	FIELD 0	FIELD 4

FIG. 10

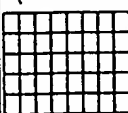
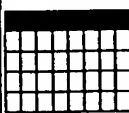
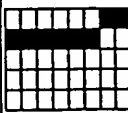
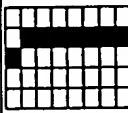
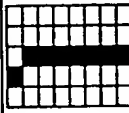
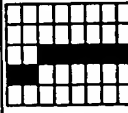
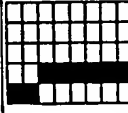

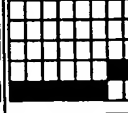
T0	T1	T2	T3	T4	T5	T6	T7	T8	
IF	EXP	EXE	WB	INSTRUCTION 1					
INSTRUCTION 3	IF	EXP	EXE	WB	INSTRUCTION 2				
	INSTRUCTION 4	IF	EXP	EXE	WB				
		INSTRUCTION 5	IF	EXP	EXE	WB			
			IF	EXP	EXP2	EXE	WB		
			INSTRUCTION 6	IF	EXP	EXE			
REFETCH SIGNAL LINE 13	0	0	0	0	0	1	0	0	
INSTRUCTION LENGTH SIGNAL LINE 68	0	24	12	32	4	36	0	12	8
INSTRUCTION ADDRESS BUS 64	0	0	24	36	68	72	108	108	120
ADDRESS BUS 3	0	32	56	68	100	104	136	140	152
WRITE ENABLE BUS 43	11111111	11111100	10000011	11111111	01000000	11111111	00100000	00011100	00000011
DATA LATCHED IN THE INSTRUCTION BUFFER40 (INDICATED IN CORRESPONDENCE WITH FIG.9)									
									
HEADER ADDRESS BUS 65	0	0	1	2	3	0	1	2	
FIELD 0 (SELECT SIGNAL 44)	0	1	6	1	1	3	-	-	6
FIELD 1	2	7	2	-	4	-	3	-	-
FIELD 2	-	0	3	-	5	-	4	-	-
FIELD 3	-	-	4	-	6	-	5	-	-
FIELD 4	3	-	5	-	7	-	-	7	-
FIELD 5	-	-	6	-	0	-	-	-	-
FIELD 6	4	-	7	-	1	-	-	-	-
FIELD 7	5	-	0	-	-	2	-	-	-

FIG. 11

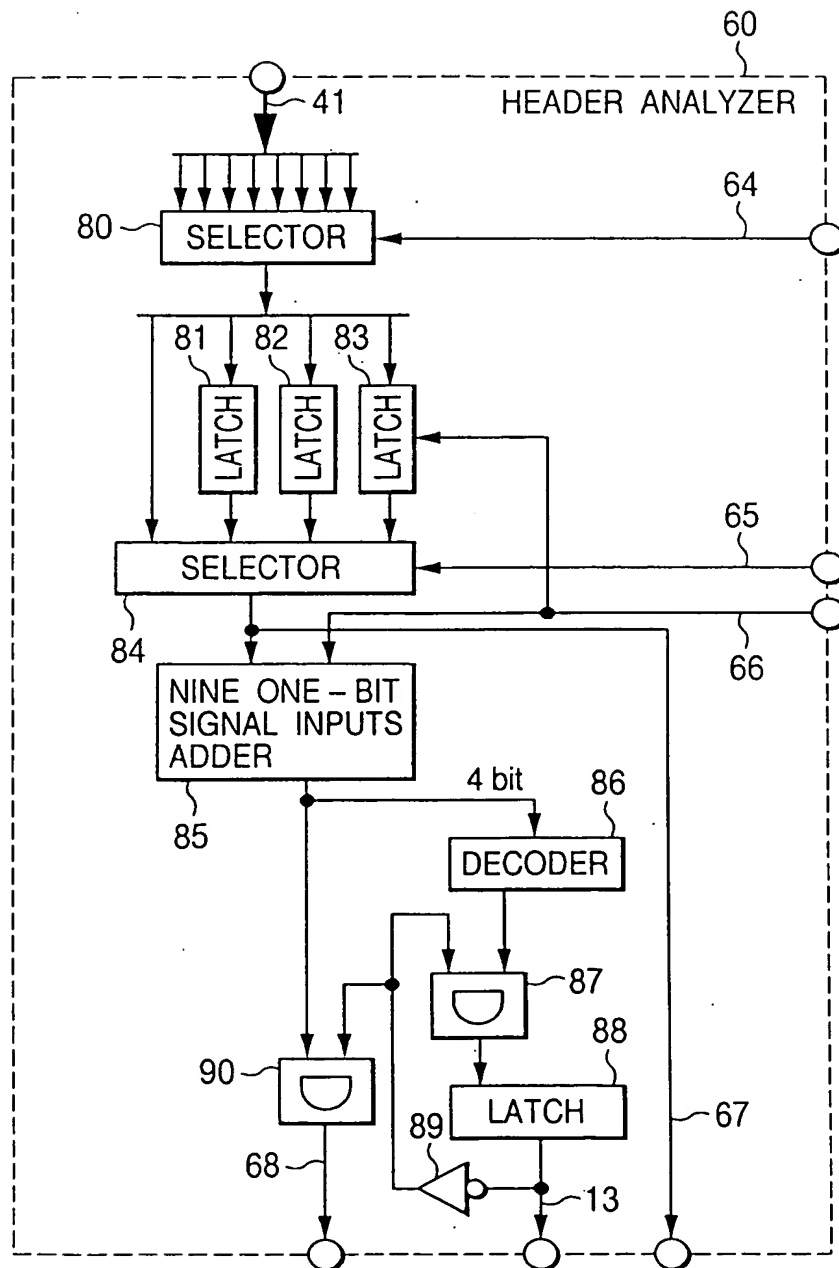


FIG. 12

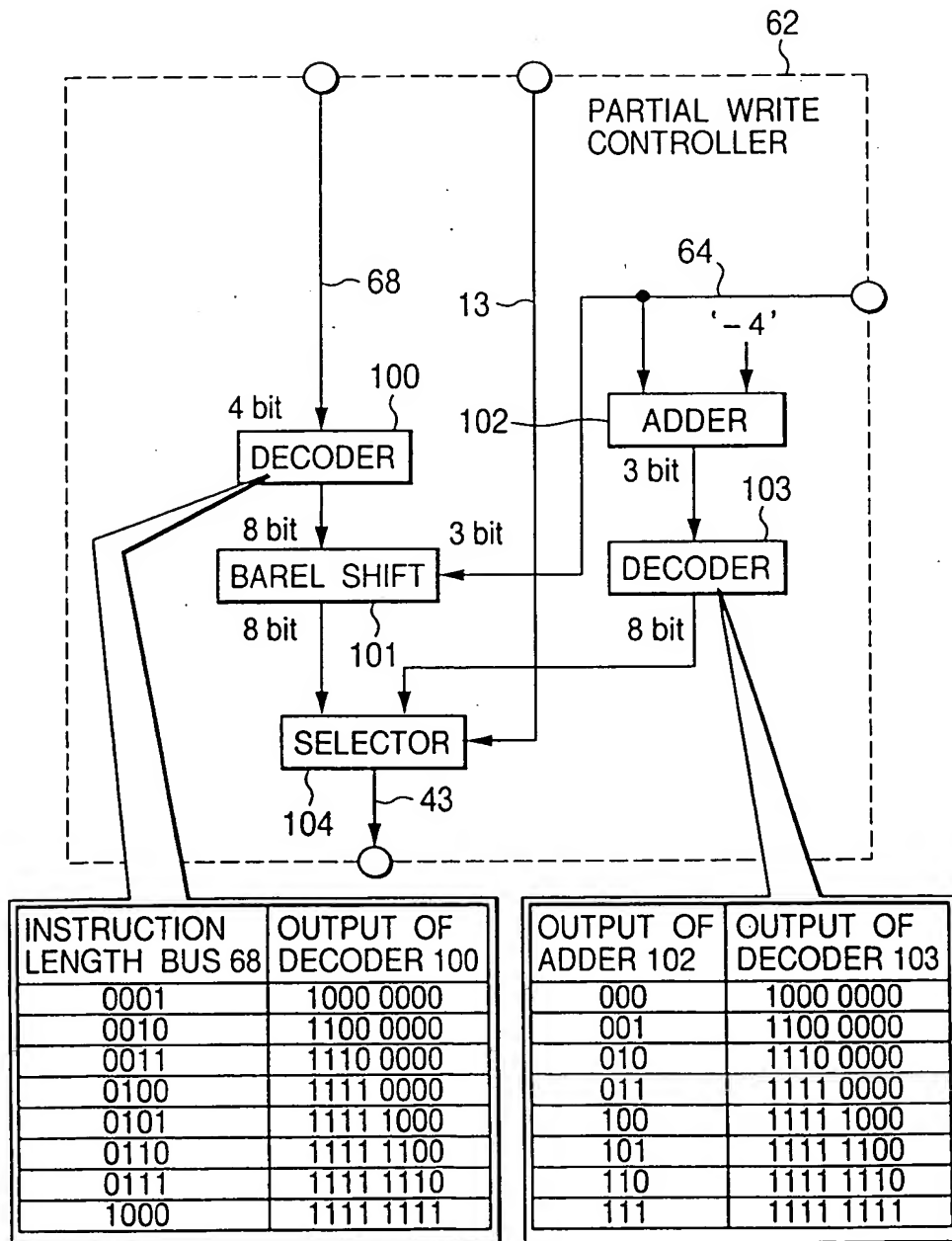


FIG. 13

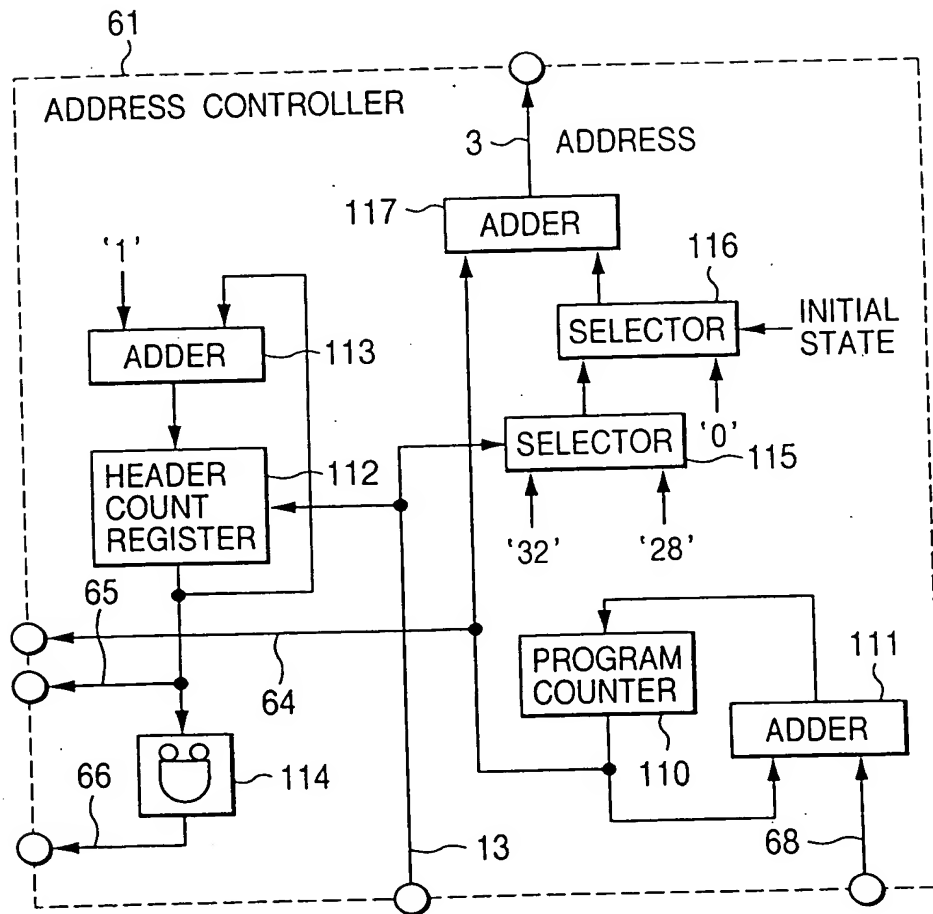


FIG. 14

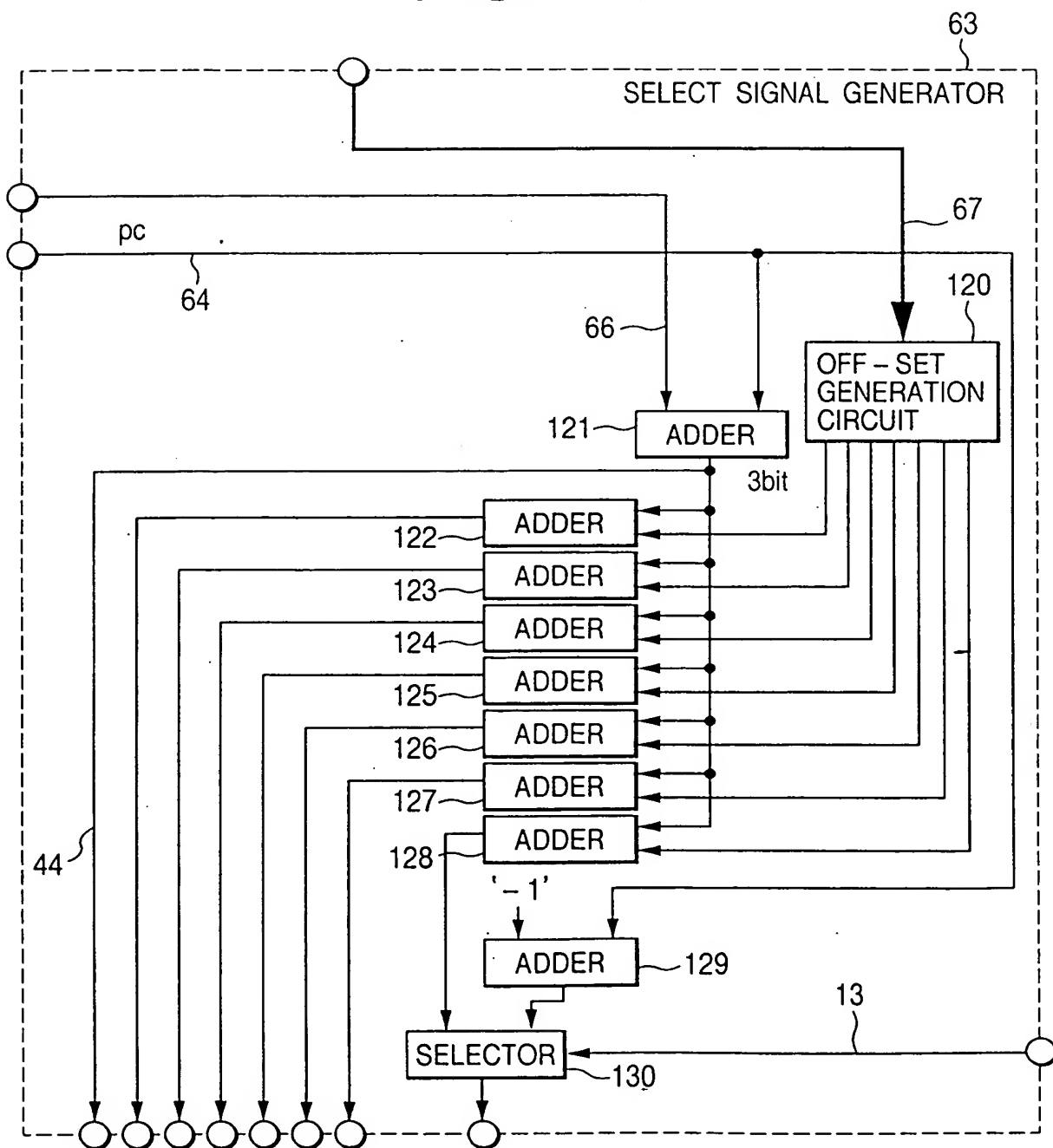


FIG. 15

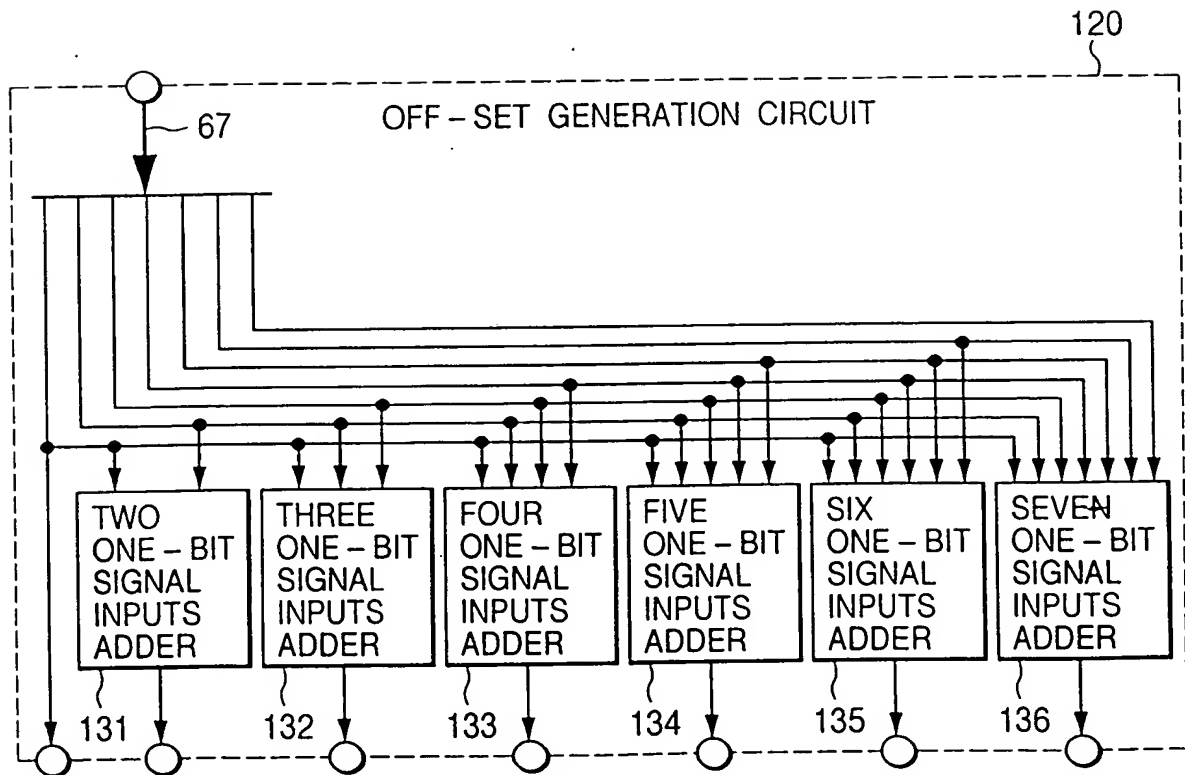


FIG. 16

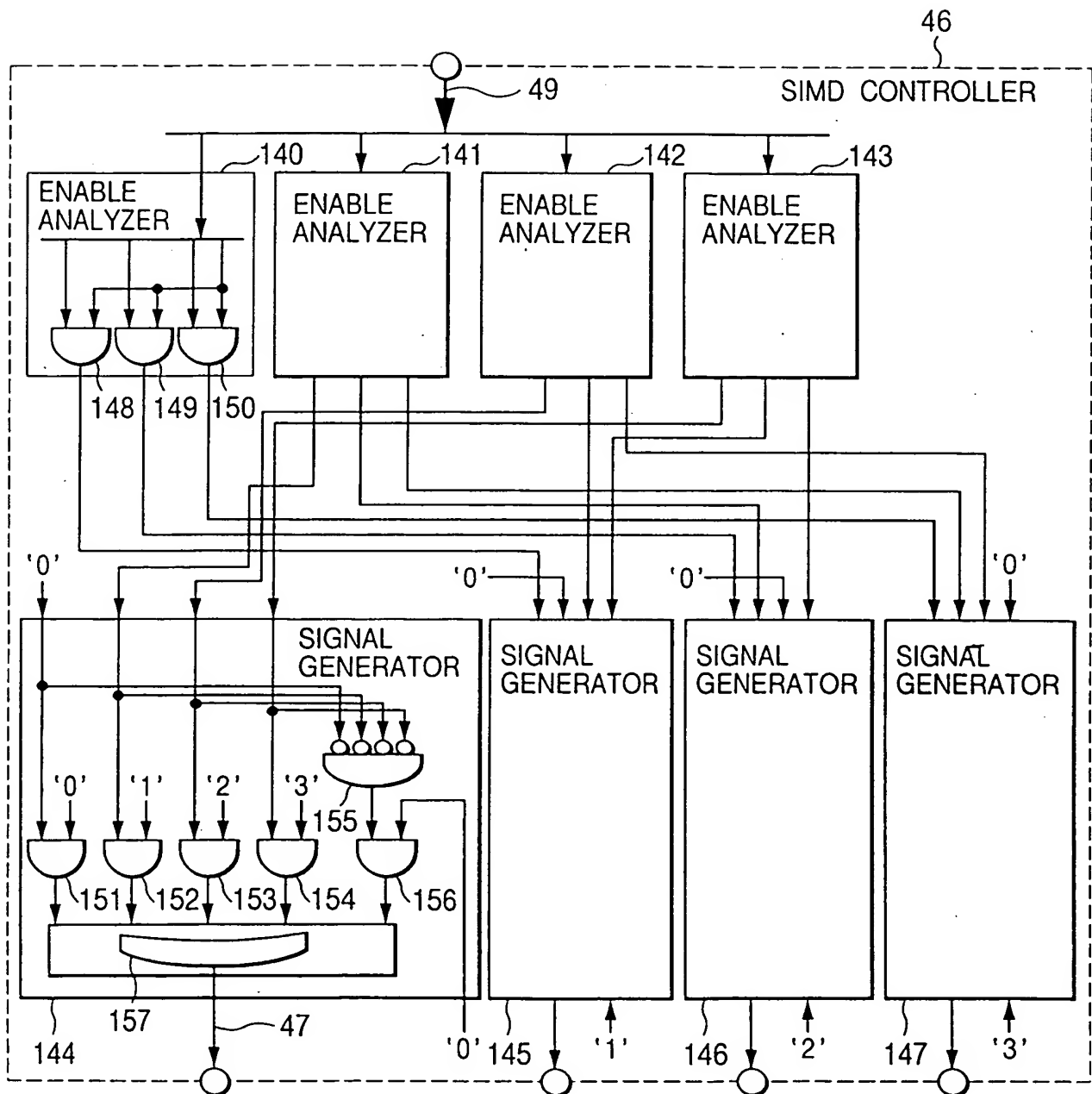


FIG. 17

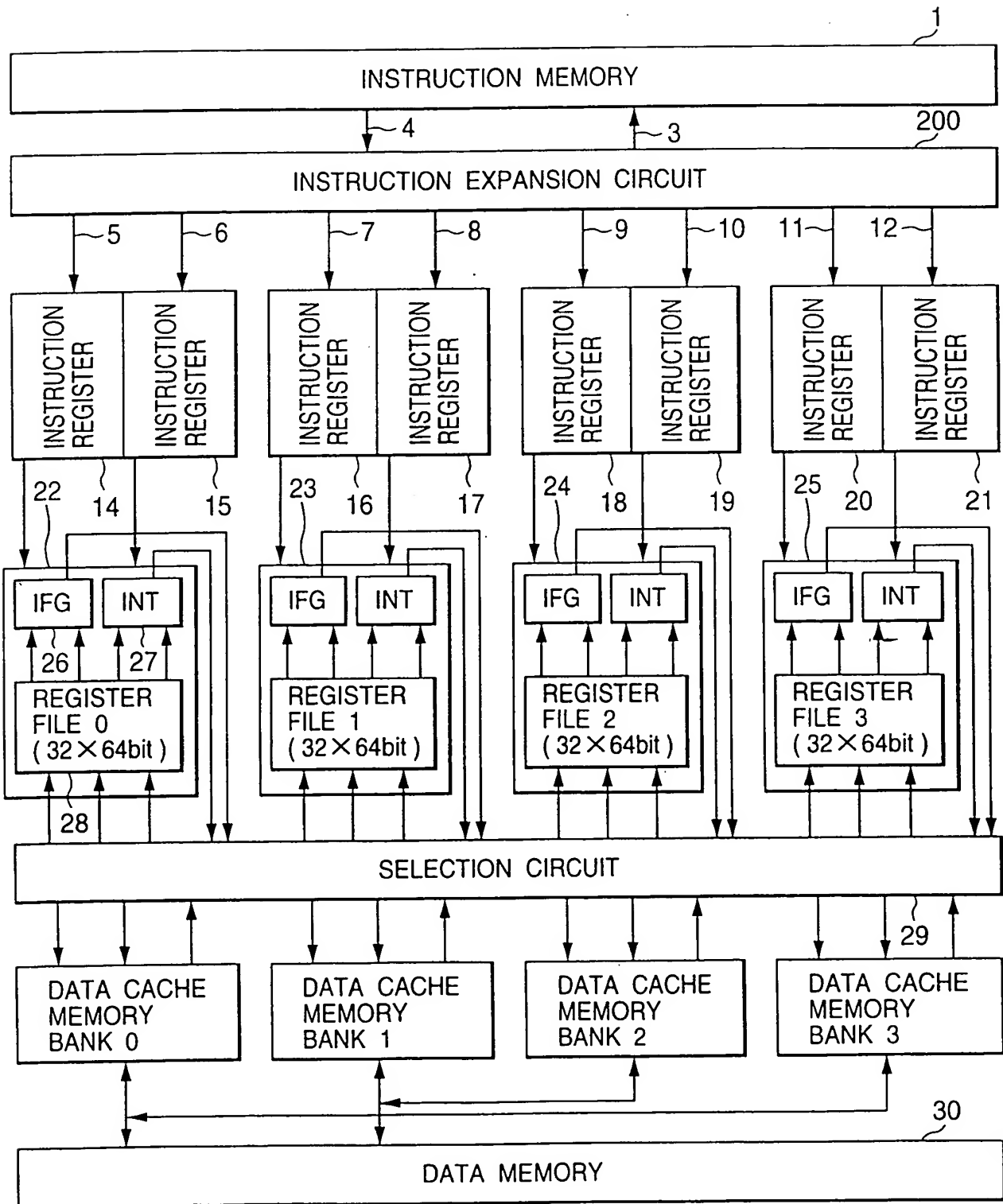


FIG. 18

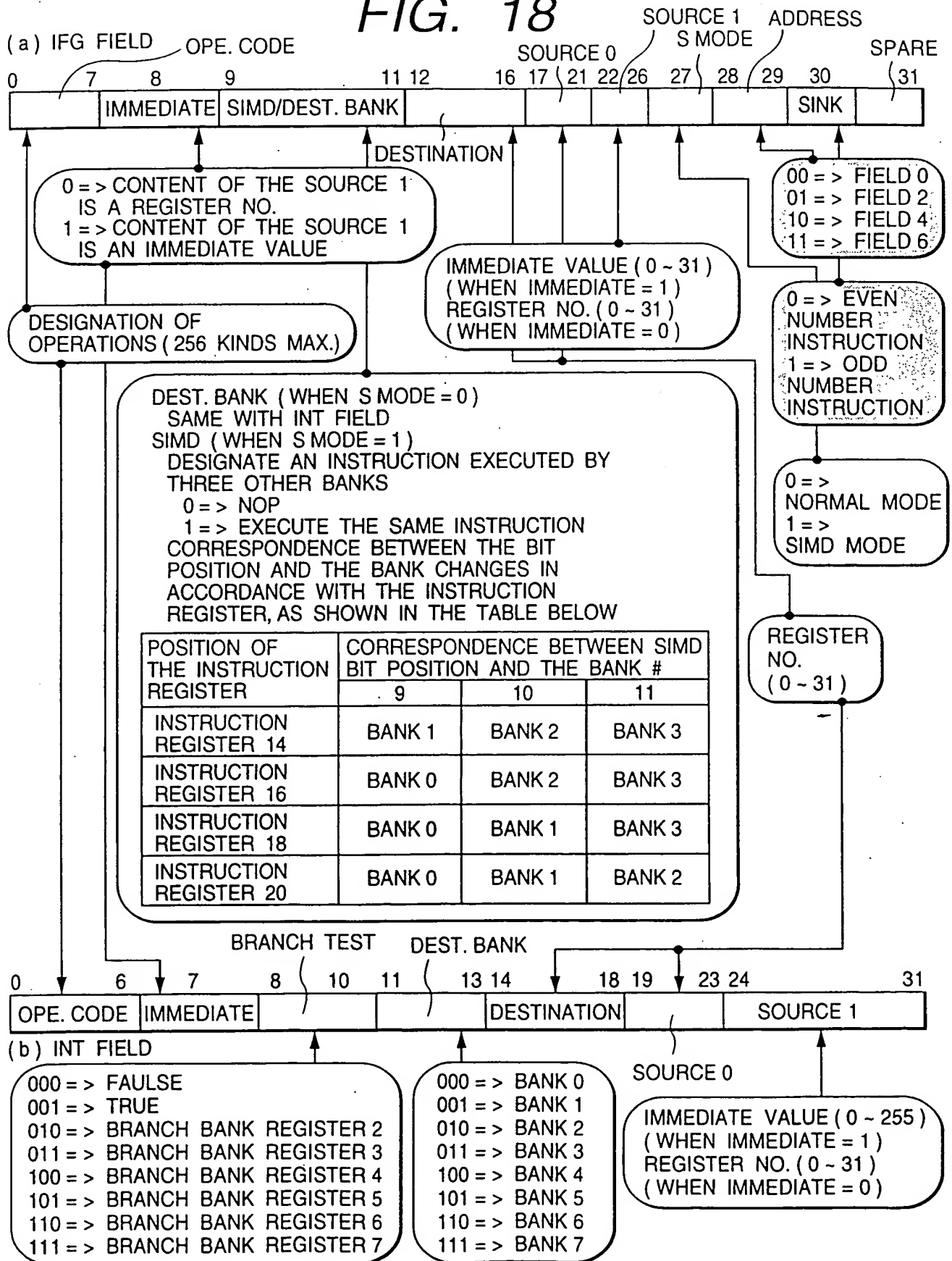


FIG. 19

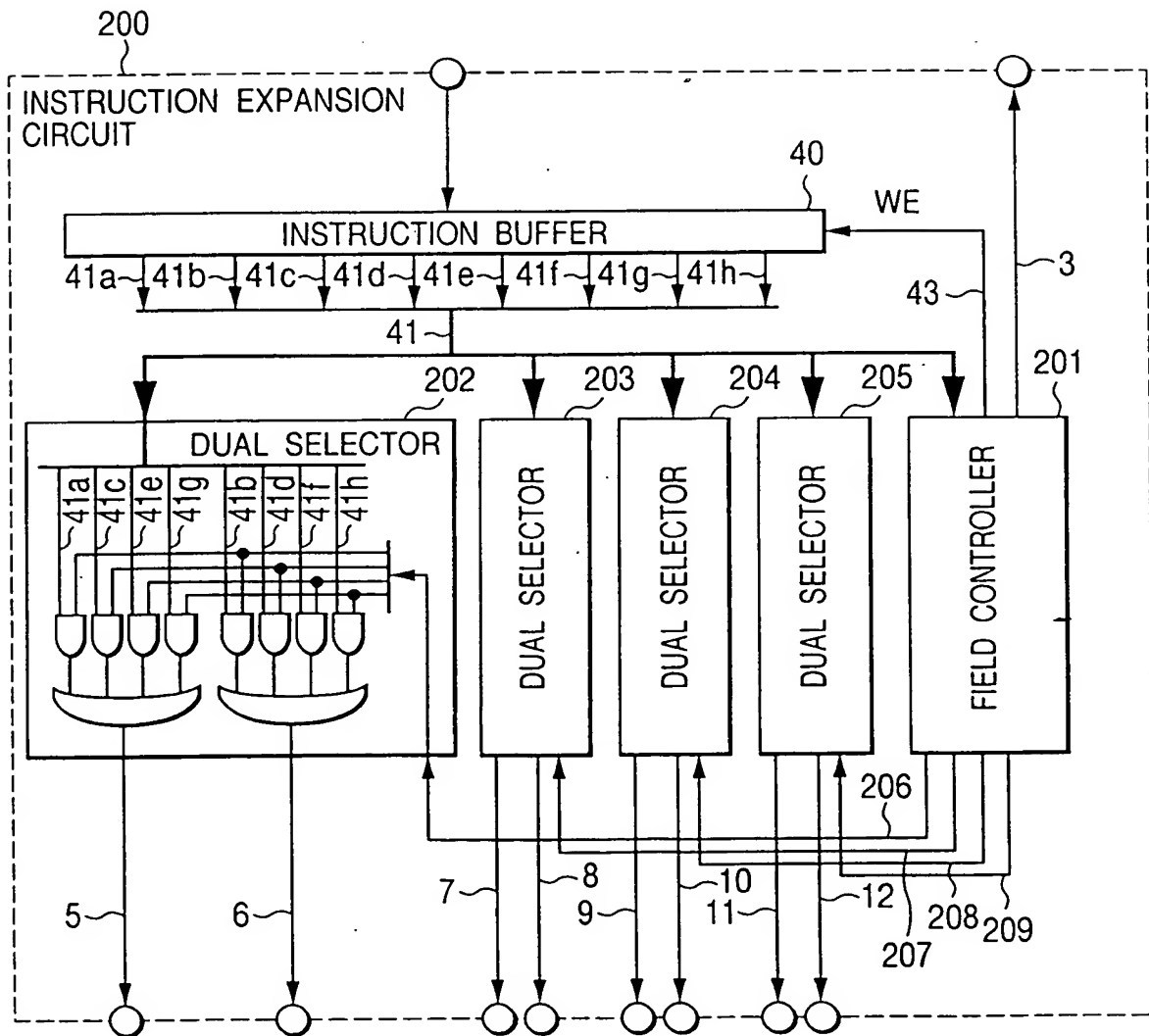


FIG. 20

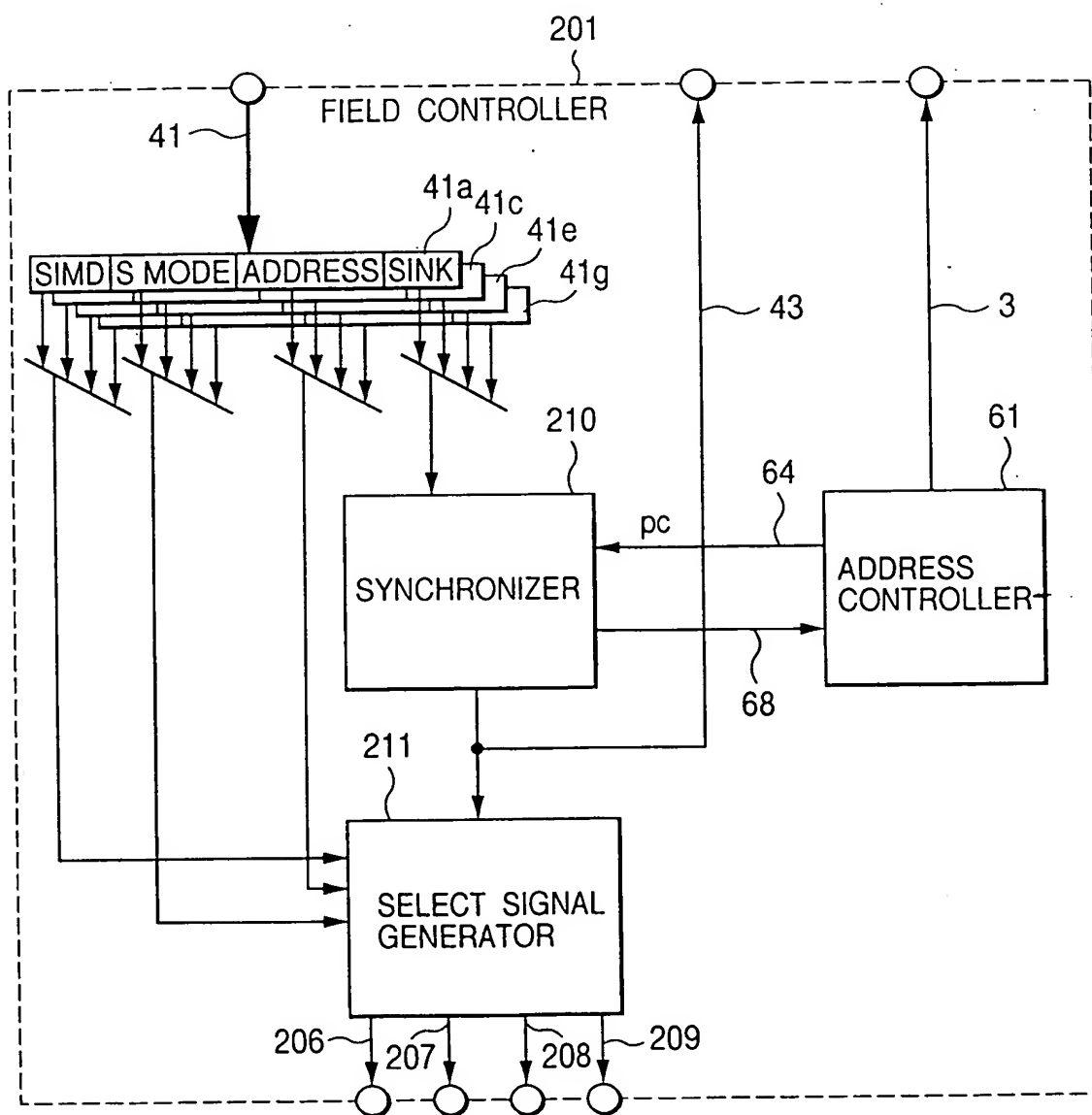


FIG. 21

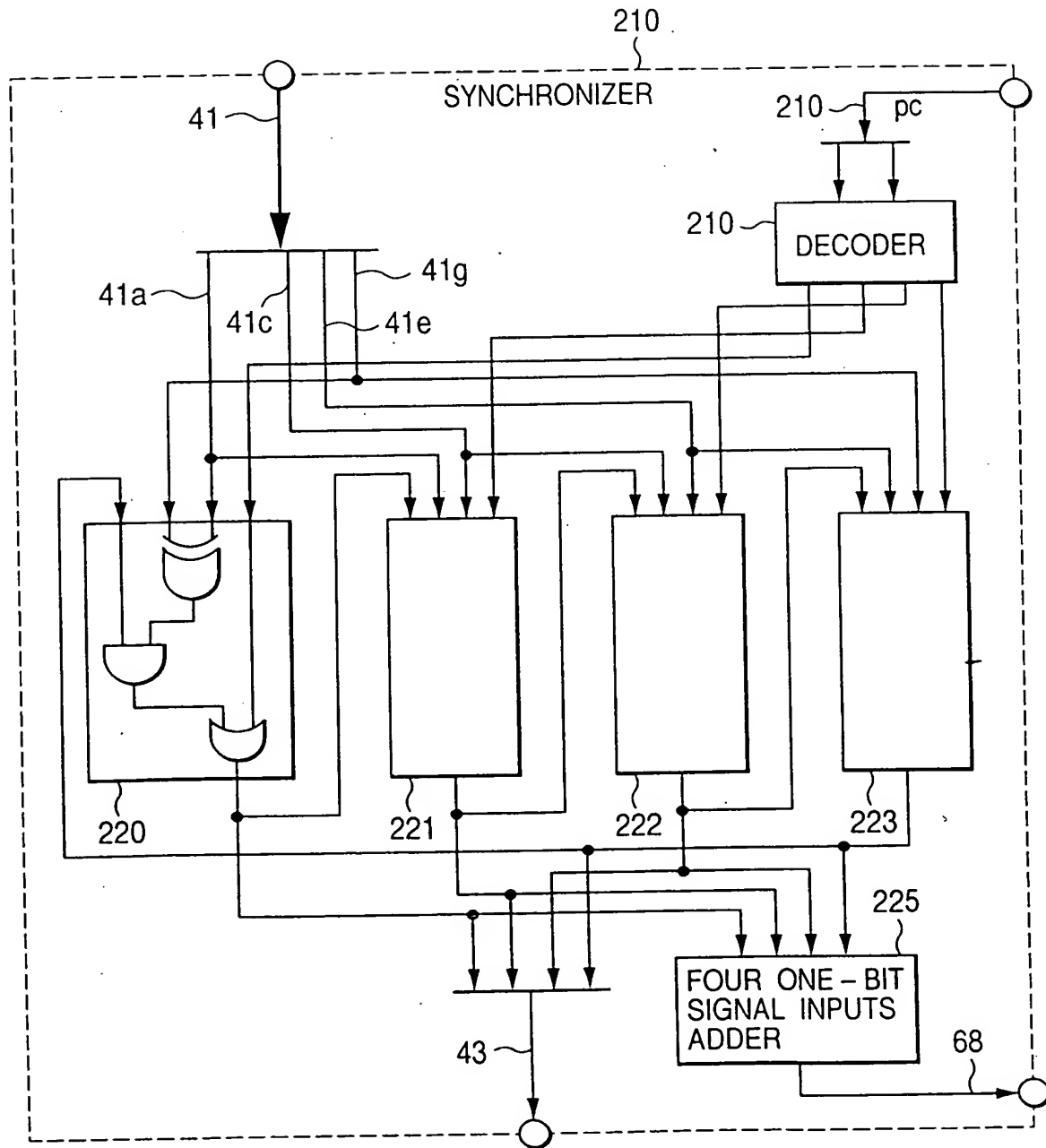


FIG. 22

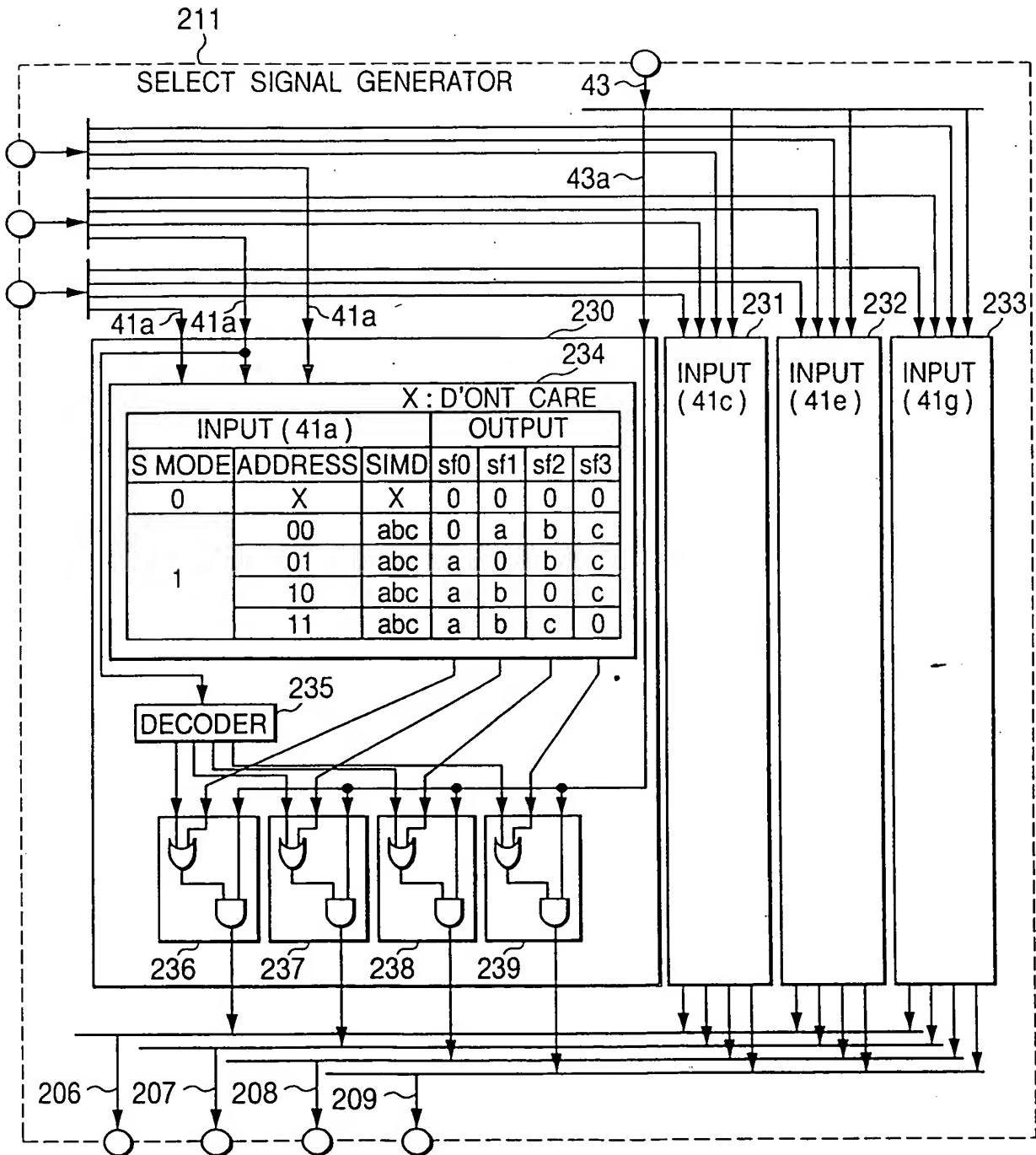


FIG. 23

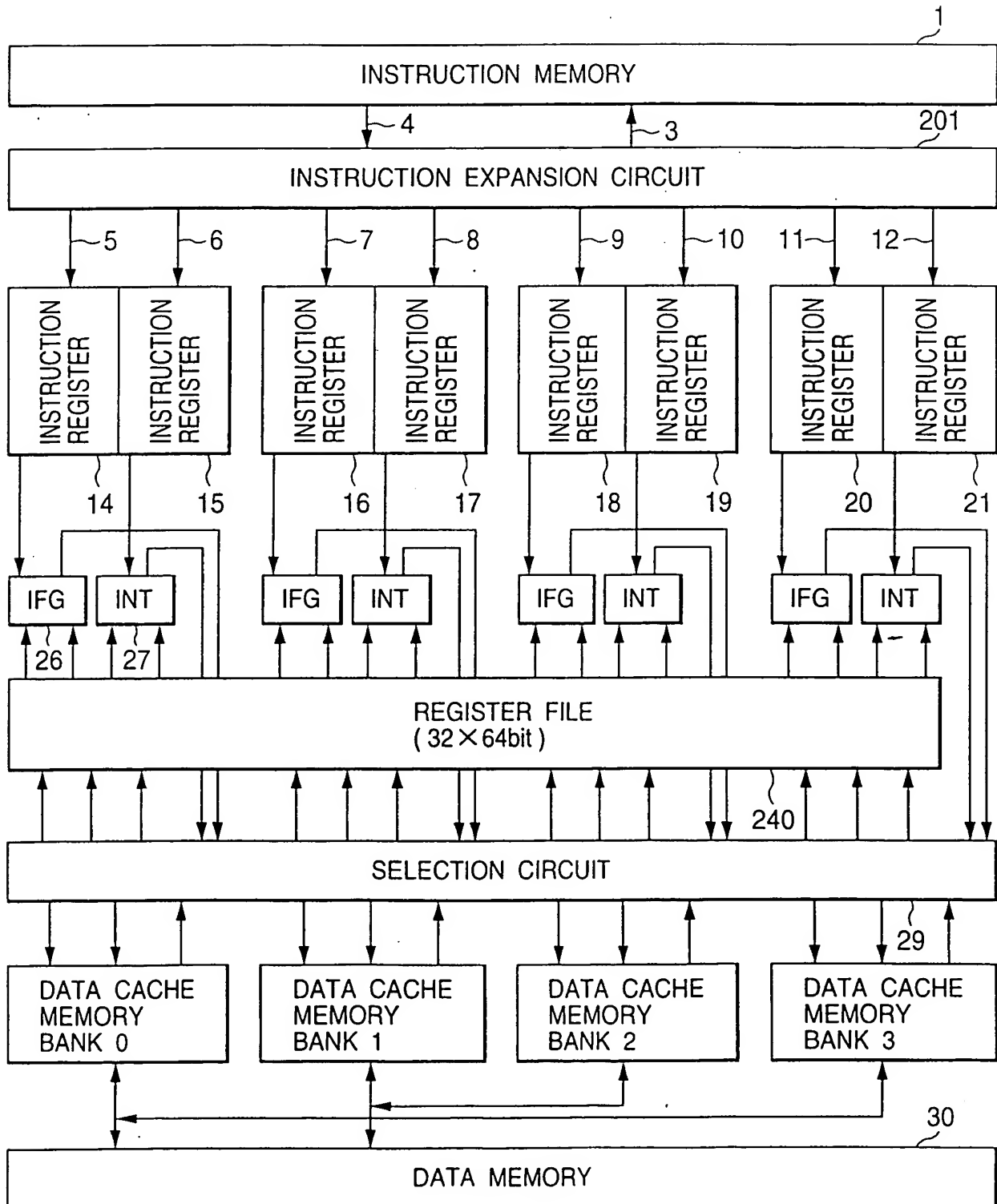


FIG. 24

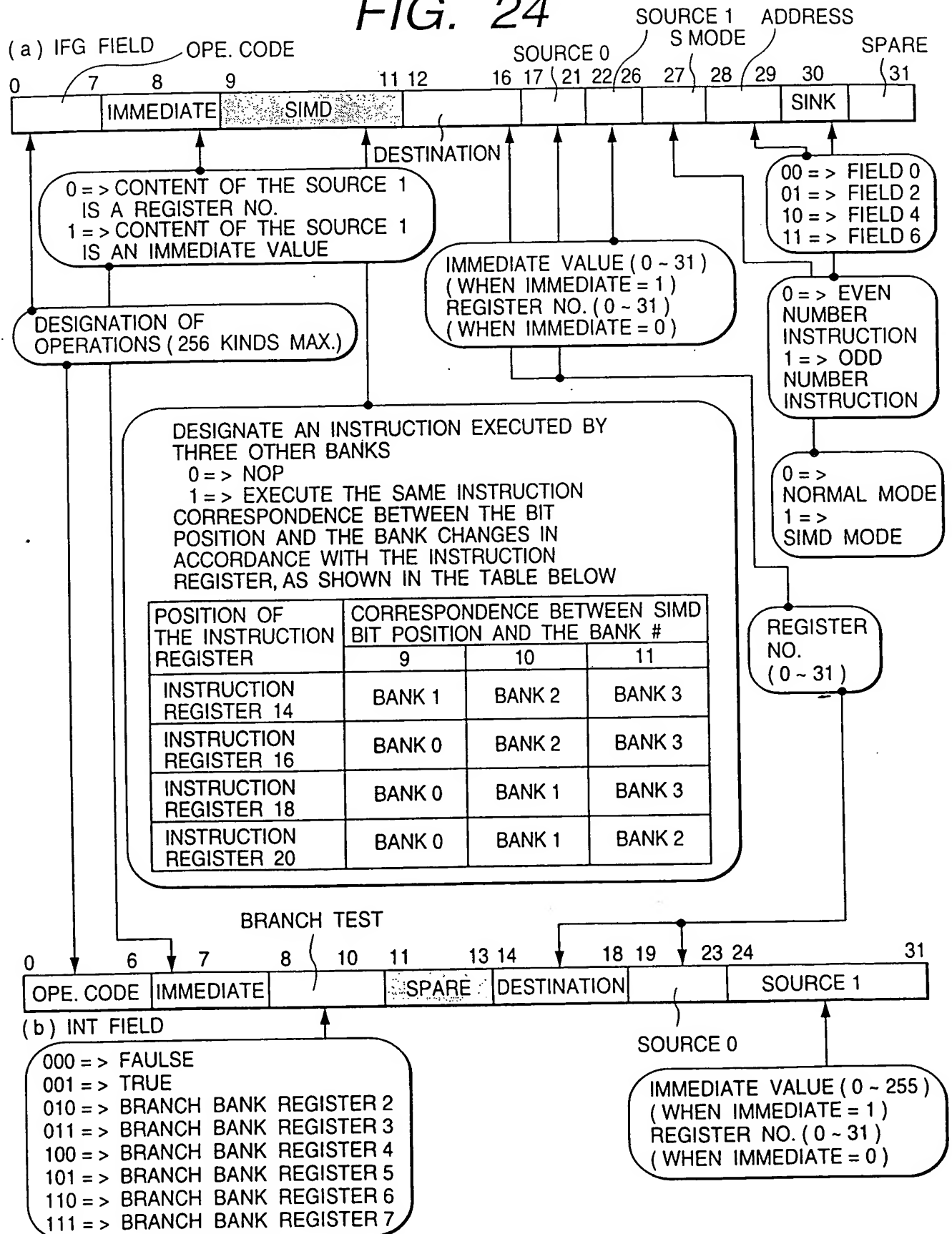


FIG. 25

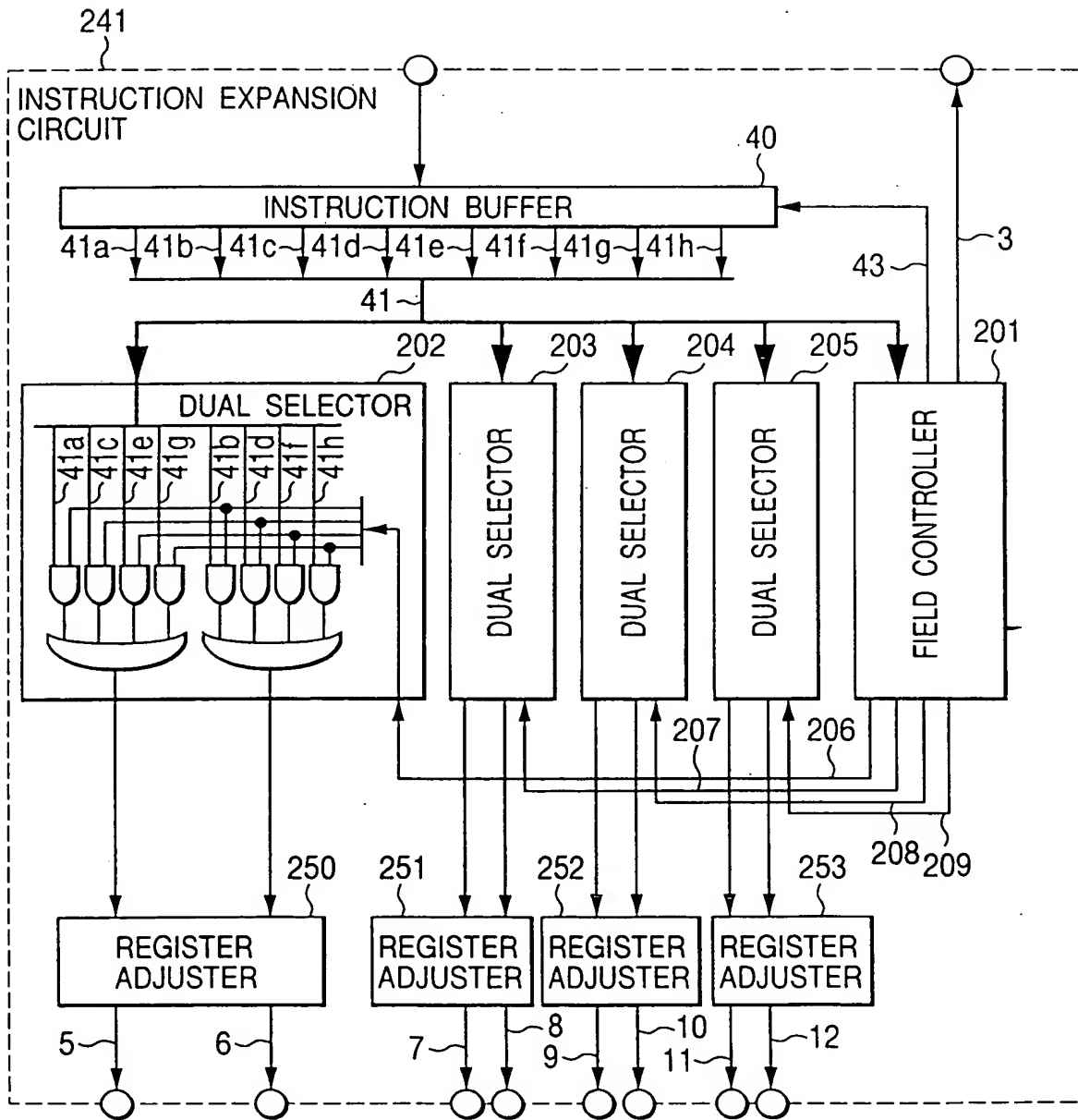


FIG. 26

INPUT FIELD			OUTPUT FIELD
S MODE	ADDRESS	REGISTER #	REGISTER #
0	X	N	N
1	00	N	N
	01	N	N + 3
	10	N	N + 2
	11	N	N + 1

FIG. 27

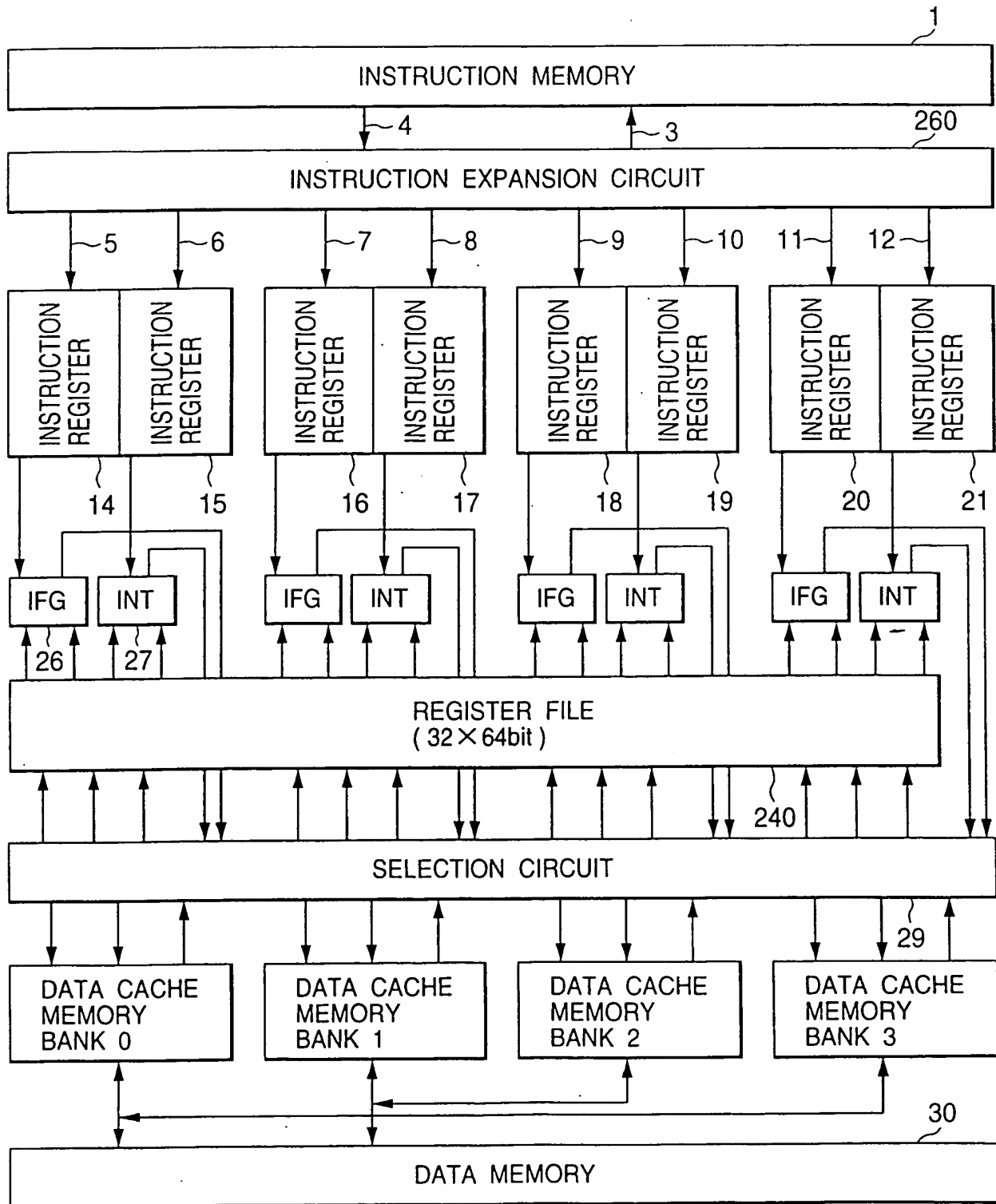
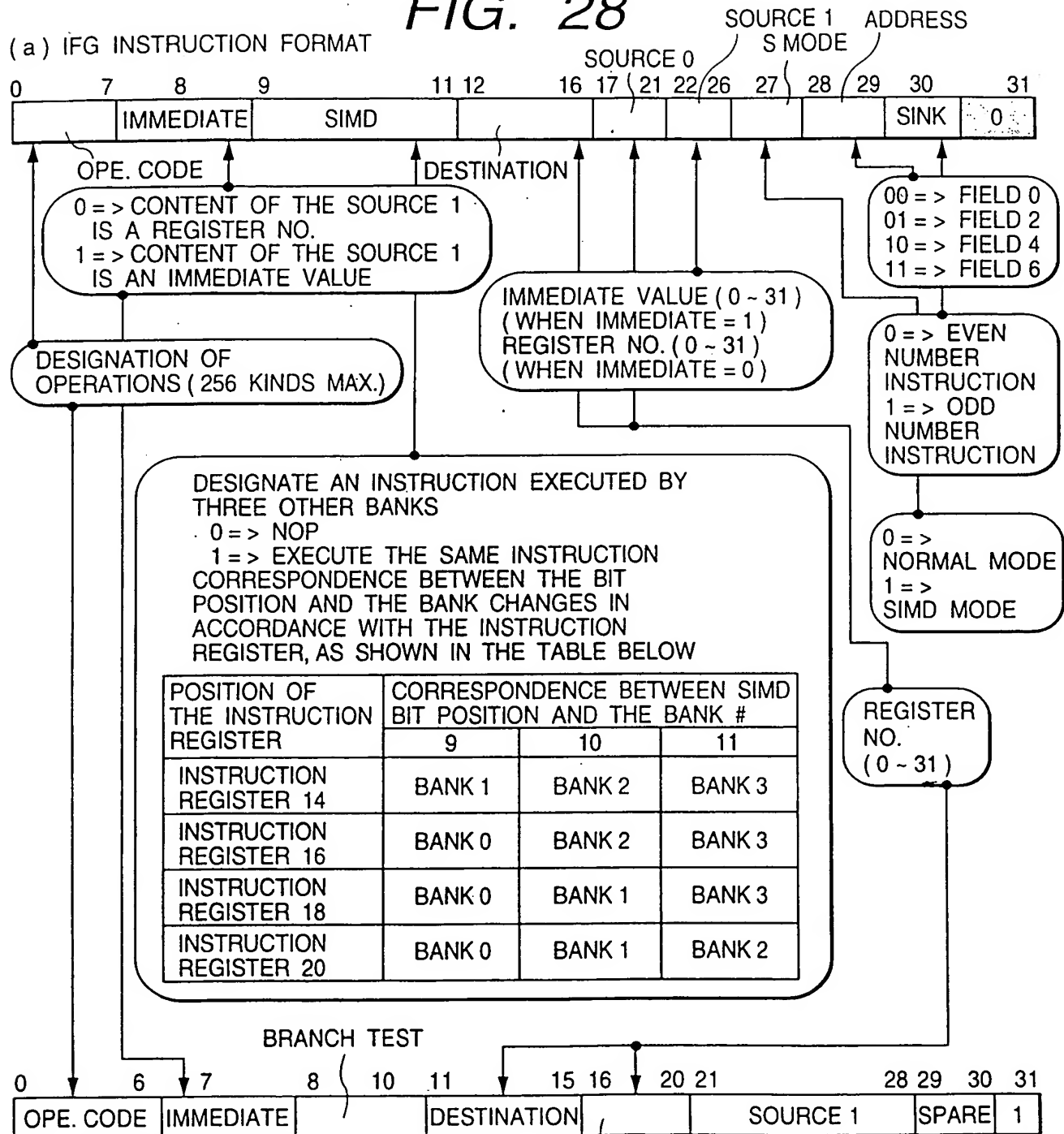


FIG. 28

(a) IFG INSTRUCTION FORMAT



(b) INT INSTRUCTION FORMAT

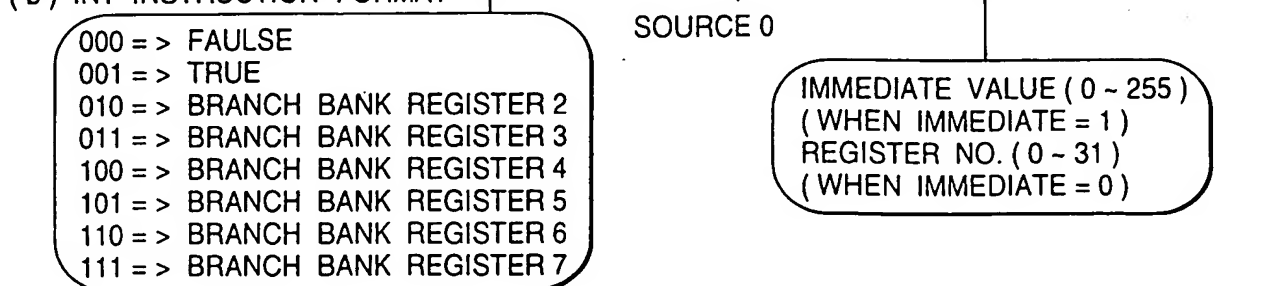


FIG. 29

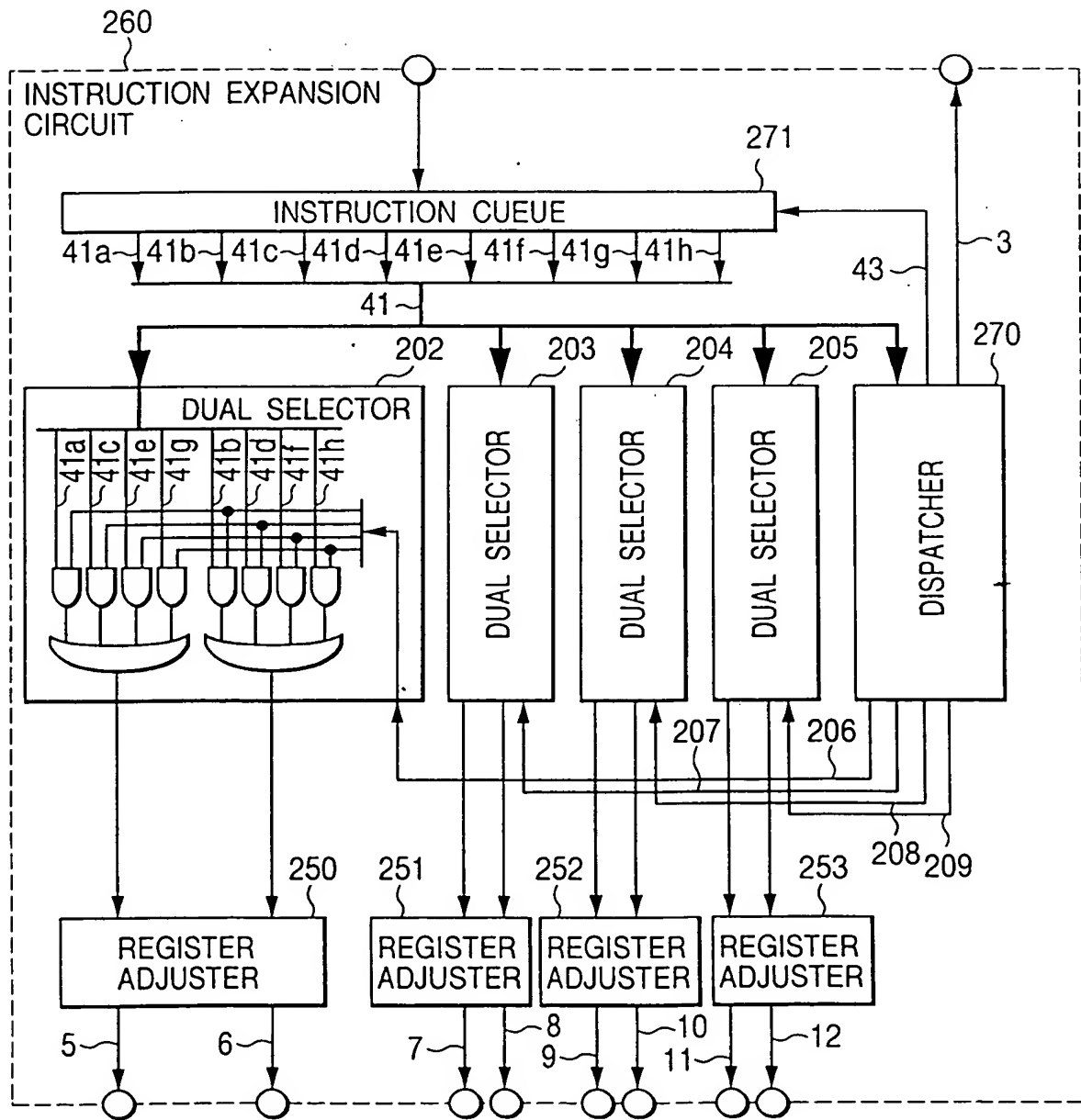


FIG. 30

